HP V1900-8G Switch

Data sheet

Product overview

The HP 1900-8G Switch delivers entry-level Layer 2 Gigabit switching solutions in a compact and quiet desktop enclosure that is customized and priced for small and midsized organizations. Without sacrificing the functionality normally required on managed networks, this managed switch offers tremendous value to small and medium businesses that need a level of control over their network not offered by unmanaged switching products—but also require a low-cost solution. The 1900-8G switch helps build a voice-ready network with QoS, RADIUS authentication, and other features. The switch has seven 10/100/1000 ports, and a dual-purpose Gigabit port (configurable as 10/100/1000 copper or SFP-based fiber) to connect to high-performance computers, servers, or network backbones. To provide improved use of network bandwidth and outstanding voice and data quality, businesses can direct traffic flow according to their needs.

Key features

- Network access security
- Out-of-the-box setup when defaults are accepted
- Enhanced intuitive management options
- Quality of Service (QoS)
- Fanless design for quiet operation

Features and benefits

Management

- **RADIUS accounting support:** separates RADIUS accounting server support per SSID; provides detailed session, usage, and billing information for each client activity
- **Uni-Directional Link Detection (UDLD):** monitors cable between two switches and shuts down the ports on both ends if the cable is broken, turning the bi-directional link into uni-directional; this prevents network problems such as loops
- **Enhanced browser-based interface:** allows even the most novice users to configure the switch during initial setup and monitor it during normal operation

Performance

- **Half-/Full-duplex autonegotiating capability on every port:** doubles the throughput of every port
- **VLANs:** segment the network by grouping users based on their data or traffic exchange requirements; help ensure improved use of available bandwidth as traffic flow is directed according to the needs of the business
- **Advanced QoS and traffic shaping:** traffic prioritization, using IEEE 802.1p Quality of Service (QoS) and Type of Service (TOS) with Differentiated Services Code Point (DSCP), helps ensure that critical time-sensitive traffic like voice is given the priority needed for quality communications
- **Rapid Spanning Tree Protocol support:** improves network compatibility, scalability, and availability
- **Flexible Gigabit uplink:** multiple units can be daisy-chained together via the built-in copper Gigabit uplink port or be connected to a network backbone via SFP-based fiber modules
- **IGMP snooping:** multicast filtering improves network performance, instead of flooding traffic to all ports

Resiliency and high availability

- **IEEE 802.1D Spanning Tree Protocol (STP):** provides redundant links while preventing network loops
- **Link aggregation (trunking):** allows any number of ports to be grouped together automatically using Link Aggregation Control Protocol (LACP), or manually, to form an ultra-high-bandwidth connection to the network backbone; helps prevent traffic bottlenecks

Security

- **IEEE 802.1X and RADIUS network logins:** control port-based access for authentication and accountability

Warranty and support

- **NEW 3-year warranty:** with advance replacement and next-business-day delivery (available in most countries)
- **NEW Electronic and telephone support:** limited electronic and telephone support is available from HP; refer to www.hp.com/networking/warranty for details on the support provided and the period during which support is available
- **NEW Software releases:** refer to www.hp.com/networking/warranty for details on the software releases provided and the period during which software releases are available for your product(s)

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Specifications

HP V1900-8G Switch (JD865A)

Ports	7 RJ-45 auto-negotiating 10/100/1000 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX, IEEE 802.3ab Type 1000Base-T) 1 SFP dual-personality 10/100/1000 port (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX, IEEE 802.3ab Type 1000Base-T) Supports a maximum of 8 auto-sensing 10/100/1000 ports
Physical characteristics	
Dimensions	9.4(d) x 17.4(w) x 1.7(h) in. (23.88 x 44.2 x 4.32 cm) (1U height)
Weight	6.4 lb. (2.9 kg)
Memory and processor	
Processor	Vitesse VSC7398 @ 25 MHz, 128 KB SDRAM, 2 MB flash
Performance	
100 Mb Latency	< 5 µs
1000 Mb Latency	< 5 µs
Throughput	11.3 million pps
Routing/Switching capacity	16 Gbps
MAC address table size	8,192 entries
Environment	
Operating temperature	32°F to 113°F (0°C to 45°C)
Operating relative humidity	10% to 90%, non-condensing
Non-operating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
Non-operating/Storage relative humidity	10% to 95%, non-condensing
Electrical characteristics	
Voltage	100-240 VAC
Frequency	50 / 60 Hz
Safety	UL 60950; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03
Emissions	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 61000-3-2 2000, 61000-3-3; ICES-003 Class A
Management	IMC - Intelligent Management Center; limited command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB
Notes	7 Gigabit ports can be operated in combination; only the eighth can be used with the SFP port. The HP V1900-8G (JD865A) Switch was formerly sold as the 3Com OfficeConnect Managed Gigabit Switch 8 (3CGSU08A) and may ship with this product labeling.
Services	3-year, 4-hour onsite, 13x5 coverage for hardware (UV786E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UW485E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UW488E) 3-year, 24x7 SW phone support, software updates (UV789E) Installation with minimum configuration, system-based pricing (UW451E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UV787E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UW486E) 4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UW489E) 4-year, 24x7 SW phone support, software updates (UV790E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UV788E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UW487E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UW490E) 5-year, 24x7 SW phone support, software updates (UV791E) 3 Yr 6 hr Call-to-Repair Onsite (UW491E) 4 Yr 6 hr Call-to-Repair Onsite (UW492E) 5 Yr 6 hr Call-to-Repair Onsite (UW493E) Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

Specifications (continued)

	HP V1900-8G Switch (JD865A)
Standards and protocols	**Device management** RFC 2819 RMON **General protocols** IEEE 802.1s Multiple Spanning Trees IEEE 802.1w Rapid Reconfiguration of Spanning Tree IEEE 802.3ab 1000BASE-T IEEE 802.3ac (VLAN Tagging Extension) IEEE 802.3ad Link Aggregation Control Protocol (LACP) IEEE 802.3ae 10-Gigabit Ethernet IEEE 802.3ag Ethernet OAM IEEE 802.3i 10Base-T IEEE 802.3u 100BASE-X IEEE 802.3x Flow Control IEEE 802.3z 1000BASE-X **MIBs** RFC 1213 MIB II RFC 1493 Bridge MIB RFC 2021 RMONv2 MIB RFC 2233 Interface MIB RFC 2233 Interfaces MIB RFC 2571 SNMP Framework MIB RFC 2572 SNMP-MPD MIB RFC 2573 SNMP-Notification MIB RFC 2573 SNMP-Target MIB RFC 2613 SMON MIB RFC 2618 RADIUS Client MIB RFC 2620 RADIUS Accounting MIB RFC 2665 Ethernet-Like-MIB RFC 2667 IP Tunnel MIB RFC 2668 802.3 MAU MIB RFC 2674 802.1p and IEEE 802.1Q Bridge MIB RFC 2737 Entity MIB (Version 2) RFC 3414 SNMP-User based-SM MIB RFC 3415 SNMP-View based-ACM MIB RFC 3418 MIB for SNMPv3 **Network management** IEEE 802.1AB Link Layer Discovery Protocol (LLDP) IEEE 802.1D (STP) RFC 1215 SNMP Generic traps **QoS/CoS** IEEE 802.1P (CoS) **Security** IEEE 802.1X Port Based Network Access Control

HP V1900-8G Switch accessories

Transceivers

HP X120 1G SFP LC LX Transceiver (JD119B)

HP X124 1G SFP LC SX Transceiver (JD493A)

Cables

NEW HP 0.5 m Multimode OM3 LC/LC Optical Cable (AJ833A)

NEW HP 1 m Multimode OM3 LC/LC Optical Cable (AJ834A)

NEW HP 2 m Multimode OM3 LC/LC Optical Cable (AJ835A)

NEW HP 5 m Multimode OM3 LC/LC Optical Cable (AJ836A)

NEW HP 15 m Multimode OM3 LC/LC Optical Cable (AJ837A)

NEW HP 30 m Multimode OM3 LC/LC Optical Cable (AJ838A)

NEW HP 50 m Multimode OM3 LC/LC Optical Cable (AJ839A)

To learn more, visit www.hp.com/networking

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